## § 109.575

# § 109.575 Accumulation of liquids on helicopter decks.

The master or person in charge shall ensure that no liquids are allowed to accumulate on the helicopter decks.

## § 109.577 Helicopter fueling.

(a) The master or person in charge shall designate persons to conduct helicopter fueling operations.

(b) Portable tanks are handled and stowed in accordance with subparts 98.30 and 98.33 of this chapter and the provisions of 49 CFR parts 171 through 179 that apply to portable tanks; and

[CGD 73-251, 43 FR 56828, Dec. 4, 1978, as amended by CGD 84-043, 55 FR 37413, Sept. 11, 1990]

#### § 109.585 Use of auto pilot.

Except as provided in 33 CFR 164.15, when the automatic pilot is used in areas of high traffic density, conditions of restricted visibility, and all other hazardous navigational situations, the master or person in charge shall ensure that—

- (a) It is possible to immediately establish manual control of the unit's steering:
- (b) A competent person is ready at all times to take over steering control; and
- (c) The changeover from automatic to manual steering and vice versa is made by, or under the supervision of, the officer of the watch.

APPENDIX A TO PART 109—NAVIGATION AND VESSEL INSPECTION CIRCULAR NO. 4-78—INSPECTION AND CERTIFI-CATION OF EXISTING MOBILE OFF-SHORE DRILLING UNITS

- 1. Purpose. To promulgate instructions for the inspection and certification of existing mobile offshore drilling units. This NVIC is also being published as appendix A of 46 CFR Subchapter IA.
- 2. Background. Mobile Offshore Drilling Units are recognized internationally through the Intergovernmental Maritime Consultative Organization as being a "special purpose ship" designed and operated to carry out an industrial function at sea. Contemporary U.S. Vessel regulations in Title 46 CFR do not adequately cover the safety considerations which are unique to the hull and structural designs, industrial equipment and operating procedures incorporated in drilling vessels. To provide appropriate and adequate

standards, the Coast Guard with the assistance of the National Offshore Operations Advisory Committee, and following the provisions of the Administrative Procedures Act, developed Subchapter IA, Regulations for Mobile Offshore Drilling Units, 46 CFR Parts 107–109 and amendments to 46 CFR Subchapters "F", Marine Engineering Regulations, and "J", Electrical Engineering Regulations. These regulations, published in FEDERAL REGISTER (43 FR 56788 December 4, 1978) will apply to all units contracted for on or after the effective date of the regulations.

- 3. Discussion. a. This NVIC elaborates the "grandfather provisions" of 46 CFR 107.211 and 107.215 in applying Subchapter IA to the approximately 150 existing ocean-going U.S. flag mobile offshore drilling units. "Existing" Mobile Offshore Drilling Units are those vessels which have been contracted for before the effective date of the regulations including:
  - (1) Units in Service.
  - (2) Units under construction.
- (3) Units contracted for which are to be constructed and delivered prior to January 1, 1981.
- b. Existing uncertificated mobile drilling units of which there are approximately 92 of the bottom bearing configuration, i.e., jackup and submersible types, have not previously been required to comply with vessel inspection regulations. Some units have met the load line requirements of Subchapter "E" for International Voyages, Many of the older units are not classed by a classification society. Bottom bearing units operating on the Outer Continental Shelf of United States have been required to meet the safety requirements of 33 CFR Subchapter "N" as artificial islands. On January 3, 1979, existing bottom bearing units are subject to the 'grandfather provisions' in §107.211(c) of Subchapter IA.
- c. Existing certificated mobile offshore drilling units, for the purposes of this NVIC, are column-stabilized and ship-shape types of which approximately 58 are currently certificated, or have made application for an original Certificate of Inspection or intend to make application for an original inspection for certification under 46 CFR Subchapter "I" on the basis of the unit being contracted for prior to the effective date of the new regulations. These units may continue to meet the structural, equipment, material and arrangement standards which were applicable to the hull, engineering, electrical and industrial systems when the units were contracted for. In addition they must meet the provisions of d.(1), d.(4)(d), d.(7)(b), d.(8), d.(9), d.(10)(b), d.(11) and d.(12) of paragraph 3 of this NVC in accordance with §107.215(c)(2) of Subchapter IA.
- d. Inspection Provisions for Existing Uncertificated Units. The intent of the

## Coast Guard, DHS

"grandfather" provisions of this NVIC for existing uncertificated units is to ascertain through inspection that the material condition of the unit and its equipment meet reasonable levels of safety. To this end, the following determinations will be made:

- The design, construction and arrangements of the hull, machinery electrical and industrial systems do not reveal manifestly unsafe aspects.
- There is no excessive deterioration of the hull structure or equipment foundations.
- There are no intrinsic fire or explosion hazards.
- There are no personnel hazards such as unguarded moving machinery, potential electrical shock conditions or lack of handrails.
- The unit is seaworthy and exhibits satisfactory stability.
- (1) General. (a) Repairs and minor alterations to hull structure or equipment may be made to the same standards as the original installation. However, new installations or major alterations which affect vessel or personnel safety shall meet the applicable standards of Subchapter IA.
- (b) Existing items of safety equipment not meeting the applicable specifications or requirements set forth in Subchapter IA may be continued in service as long as they are maintained in good working order to the satisfaction of the OCMI. Such safety equipment and installations requiring extensive repairs shall be replaced and shall meet the applicable specifications and requirements of Subchapter IA.
- (c) The OCMI has discretion to accept alternatives or equivalents which meet the established standards, and to give special consideration to departures from the regulations when it can be shown that special circumstances warrant such departures.
- (2) Plan Submittal. (a) For units not classed by the American Bureau of Shipping or other recognized classification society, (see 46 CFR 108.109) the OCMI must have sufficient plans and information submitted to him which will describe such things as the unit's size, construction, configuration, arrangement of tanks, decks and spaces; and the machinery and electrical installation. In addition, the OCMI may require submittal of any additional data he considers necessary in order to proceed with the original inspections.
- (b) For units classed by the American Bureau of Shipping or other recognized classification society, the plans and information described in Subchapter IA §107.305 (a), (b), (v), and (ii) and a general description of the machinery and electrical installation shall be submitted to the OCMI for information. The OCMI may accept continued classification as proof of structural, mechanical, and electrical sufficiency. However, the OCMI may require additional plans and information if necessary.

- (3) Hull Structure. (a) No structural changes will be required unless manifestly unsafe conditions exist.
- (b) Existing uncertificated units must be drydocked or have a special examination in lieu of drydocking as required by 46 CFR, 107-261.
- (c) Achievement of one compartment subdivision is not required where extensive modification of the original design would be necessary; however, watertight integrity of the hull and structural boundaries must be maintained. Bulkheads and decks designed to be watertight must be maintained as such where they are penetrated by pipes, electrical cable, reach rods, ventilation systems,
- (4) Stability. (a) The stability of each existing unit will be reviewed by the Coast Guard. The plans indicated in 46 CFR Subchapter IA §107.305(q) through (u-l) must be submitted to the cognizant OCMI or Merchant Marine Technical Office.
- (b) Lightship data from a Coast Guard witnessed and approved stability test is required for each existing, uncertificated unit. Alternatively other evidence of lightship values will be considered on a case by case basis.
- (c) In general, compliance with the intact stability standards of 46 CFR Subchapter IA, §§108.303 through 108.309 is required. Where existing units were designed to a lesser standard of stability than that specified in §§108.303 through 108.309, some relaxation based on proven past performance may be granted at the discretion of the OCMI and limiting conditions, if any, set forth in the operating manual. In no case will the minimum wind speed for adequate stability be reduced below 50 knots.
- (d) An operating manual shall be prepared for each unit. Each operating manual must contain the information indicated in 46 CFR Subchapter IA, §109.121(d) and be submitted to the cognizant OCMI or Merchant Marine Technical Office for review.
- (5) Load Line. (a) All units are required to obtain and maintain a valid Load Line Certificate. The structure and stability of the unit must be proven adequate for the voyages and areas of operation intended.
- (b) The American Bureau of Shipping or other recognized classification society will issue Load Line Certificates and conduct initial and annual load line surveys. Coast Guard and the American Bureau of Shipping inspections may be conducted simultaneously, but it is the owner's responsibility to arrange coordinated inspection schedules.
- (c) The structural review conducted by the American Bureau of Shipping or other recognized classification society for load line assignment may be accepted by the Coast Guard as proof of structural adequacy of the hull.
- (d) The stability review must be completed prior to issuance of a Load Line Certificate.

## Pt. 109, App. A

The Coast Guard will inform the American Bureau of Shipping or other recognized classification society of the results of the stability review, and will indicate any stability limitations to be placed on the Load Line Certificate.

- (e) Freeboard calculations for self-elevating units with barge type hulls will be made in accordance with 46 CFR, Part 42. The bow height requirements of 46 CFR 42.20–70 may be relaxed to approximately 33% of the normal requirement for barge shapes moving at speeds less than 6 knots. No relaxation of the addition to freeboard for deficiency in sheer is allowed. The freeboard for units other than self-elevating units with barge type hulls will be based upon compliance with the intact and damage stability standards applicable at the time the unit was contracted for.
- (f) All units delivered after the date of this NVIC regardless of contract date, must obtain a Load Line Certificate as soon as operationally feasible.
- (6) Route and Operating Area Limitations. (a) Units classed by the American Bureau of Shipping or other recognized classification society for ocean service generally will be certificated by the Coast Guard for ocean routes.
- (b) Unclassed units which have proven structural and stability adequacy by continued safe operation in a specific geographic area, such as the Gulf of Mexico, will be limited by the Certificate of Inspection and Load Line Certificate to that area. To qualify for an unlimited oceans route, such a unit must be reviewed for adequacy of the structure and stability by the Coast Guard and meet the Load Line requirements of d. (5) above.
- (c) Any unit which intends to move or operate outside the geographical area indicated on the Certificate of Inspection must receive prior approval from the OCMI.
- (7) Fire Protection. (a) Structural fire protection. All units must meet the provisions of §108.123, Insulation of Combustible Materials and §108.127, Storage Lockers for Combustibles. All existing interior stairways which are open at each end must be enclosed at one level. On units where wood was utilized in the construction of accommodation spaces, each space must be equipped with a smoke or heat detector either battery powered or operating on the AC power supply. All detectors must have the Underwriters Laboratories, Inc., label (UL) or the Factory Mutual Laboratories (FM) label.
- (b) Fire Extinguishing Systems. Systems and equipment must be provided which will meet or be equivalent to the applicable specifications and provisions required by Subchapter IA. Installed fire extinguishing systems, which provide equivalent or greater protection than systems required by Subpart E, Subchapter IA may be continued in use as

long as they are in good material condition and will function as designed. Where practicable, existing washdown systems may be utilized as the firemain. Where wood was utilized in the construction of accommodation spaces, the applicable requirements of 46 CFR Subchapter IA, Table 108.495(a) should be doubled.

- (8) Lifesaving Equipment. (a) Each unit must have lifesaving equipment (lifeboats and davit launched liferafts) for 200 percent of the total persons allowed on board. Except for submersible type units, the installation of lifeboats for 100 percent of the persons (on board) is required in accordance with 46 CFR 108.503 of Subchapter IA. Consideration will be given to those units where existing arrangement and structure do not provide sufficient room for installation of the lifeboats or where the added weight of the lifeboats, davits and winches will materially reduce the variable load capacity of the unit. In such cases, davit launched inflatable liferafts with a combined personnel capacity of the required lifeboats, and a rescue boat approved by the OCMI may be acceptable equivalents. Submersible type units may substitute Coast Guard approved throw over type inflatable liferafts and an approved rescue boat for the required lifeboats.
- (b) For the second part of the total 200 percent primary lifesaving requirement, lifeboats installed in accordance with 33 CFR, Subchapter "N" Part 144 or Coast Guard approved life floats may be retained as provided for in 3.d(1)(b) of this Circular. They will be considered collectively with the Coast Guard approved liferafts for calculating the amount of equipment to provide for 100 percent of personnel on board.
- (c) Adequate access to all lifesaving equipment must be provided.
- (9) Cranes. (a) Plan approval will not normally be required of any crane which conforms to the specifications of the manufacturer as originally installed. A rated load test as described in §107.260 of Subchapter IA will be required unless the crane has been load tested while under certification by an approved certifying authority as provided for in 46 CFR 107.258. Prior to the rated load test, the crane should be identified by manufacturer and model number to determine that the correct load rating chart is being used. The owner must submit to the OCMI details and calculations of any alterations to a crane which were accomplished without manufacturer's documentation in order to verify the rated load of the crane.
- (10) Electrical. (a) Multiple power sources do not require an emergency generator; however, storage batteries or approved relay-controlled battery operated lanterns are required to be installed for the emergency lighting system and provide 12 hours of lighting.

## Coast Guard, DHS

- (b) Electrical equipment installed in Class I, division 1 and 2 locations, as defined in Subchapter IA, §108.170 must be of a suitable type and in good material condition.
- (11) Unfired Pressure Vessels. (a) Unfired pressure vessels built and stamped in accordance with Section VIII of the ASME Code may be continued in service as long as they remain in satisfactory condition. At the original and subsequent inspections for certification, ASME Code pressure vessels must be tested and examined in accordance with the requirements in 46 CFR 61.10-5.
- (b) Unfired pressure vessels which cannot be identified as being constructed to any recognized standard may be continued in service provided that no obvious defects are noted. These pressure vessels shall be hydrostatically tested to one and one half times the working pressure. For pressure vessels that can not be reasonably hydrostatically tested, nondestructive testing may be used to verify the pressure vessels condition for continued serviceability. These pressure vessels will then be stamped with a Coast Guard identification number and periodically tested and examined in accordance with the requirements in 46 CFR 61.10-5.
- (12) Marine Sanitation Devices. (a) All units must meet the provisions of 33 CFR Part 159, Coast Guard Marine Sanitation Devices Regulations. The discharge requirements are compatible with the OCS Orders of the U.S. Geological Survey.
- 4. Action. a. The owner of each existing certificated unit must provide the cognizant OCMI a proposed plan to accomplish the requirements in paragraph 3. c. of this NVIC within 60 days from the effective date of the regulations. Most items should be approved at the unit's next inspection for certification; however, where major equipment installations are concerned, the owner may be allowed up to two years to comply with the requirements from the time the OCMI completes his assessment of the proposals.
- b. Application for Original Inspection for Certification. Not later than sixty days from January 3, 1979, application for original inspection for certification of all existing uncertificated units, shall be submitted to the appropriate OCMI. The plans or descriptive data specified in paragraph 3.d(2) of this NVIC along with a proposed plan to bring the unit into compliance should, if possible, be submitted with the application for inspection. If not feasible to assemble all required information in this time frame, an estimated date of submittal shall be indicated on the application. Arrangements should be made to commence the original inspection for certification with due consideration for the unit's operating situation.
- c. To the extent possible the same inspection team will conduct the inspection of all existing uncertificated units in a geo-

- graphical area. It may be advantageous to conduct the original inspection in conjunction with an impending special or periodic survey, drydocking or availability period. Units under construction will receive primary consideration by the OCMI for the allocation of time and personnel so that any problems can be identified while the unit is in the most advantageous situation to apply corrections
- d. The variety of designs and arrangements presented by existing uninspected MODU's makes it impractical to prescribe detailed standards for all existing units. The procedures followed to implement this NVC must provide the necessary flexibility. Items which must be taken into consideration in applying this NVIC are listed below. Categorizing units into groups to which the same items apply will be of value during the inspection process. These items are:
  - Type
  - Builder
  - Model
  - Date build
- Classed by ABS or other classification society
- $\bullet\,$  Load Line assignment
- Operating history (including geographical areas)
- Present location
- e. Issuance of the Original Certificate of Inspection. The intent of the original inspection of existing uncertificated units is to identify and commence correction of any unsafe conditions and/or equipment deficiencies and to issue the unit an original Certificate of Inspection. A reasonable period of time will be permitted to correct minor deficiencies. Those items directly affecting personnel safety and health will require immediate attention to correct the unsafe condition. Extensive deficiencies, such as those involving structural aspects or equipment may require up to two years to remedy. Additional times may be allowed if repair facilities are not available to coastal areas adjacent to the unit's area of operation. Where manifestly unsafe conditions are found, the OCMI may require that the unit discontinue operations until such conditions are corrected. If the owner or operator feels aggrieved by the decision of the OCMI, the appeals procedures of 46 CFR 2.01-70 are applicable.
- f. Questions concerning this NVIC should be referred to the Commandant (CG-CVC).
- [CGD 73-251, 43 FR 56828, Dec. 4, 1978, as amended by CGD 96-041, 61 FR 50730, Sept. 27, 1996; USCG-2009-0702, 74 FR 49233, Sept. 25, 2009; USCG-2012-0832, 77 FR 59781, Oct. 1, 20121